

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

Aug. 22-23, 2022

Aug. 30-31, 2022

ATTN: PETER SCHAEFER, STDS. IMPLEMENTATION TEAM

MC 150

DEPARTMENT OF THE ARMY PERMIT 9009

401CERTS@tceq.texas.gov

RUSSELL J. MIGET PhD
6010 IDYLWOOD DRIVE
CORPUS CHRISTI, TX 78412
(361) 947-3288
russell6104@att.net

INTRODUCTION

The following are water quality reports for the canals and contiguous waters of Padre Isles, Corpus Christi, Texas, which fulfill the monitoring requirements as set forth in a letter from TCEQ (Sidne Tiemann) to the USACE (Mark King) dated October 12, 1994. All temperature measurements are in degrees centigrade. All dissolved oxygen measurements are in milligrams per liter.

METEOROLOGICAL CONDITIONS

Aug. 22, 2022. Day. Pt. cloudy. Wind SE 25 mph. 34.0 C.

Aug. 23, 2022. Night. Wind SE 5 mph. 27.5 C.

Aug. 30, 2022. Day. Sunny. Wind SE 5-10 mph. 33.3 C.

Aug. 31, 2022. Night. Wind SE 5-10 mph. 30.2 C.

Date	Time	Station	Temp. C	D.O. mg/l
8/22/2022	1925	1	30.8	7.7
	1630	2	30.6	4.8
	1935	3	32.8	10
	1800	4	30.8	7.1
	1640	5	31.7	6.4
	1655	6	31.7	6.8
	1720	7	30.7	7.4
	1820	8	31.6	8.8
	1835	9	30.8	8.3
	1845	10	31.8	9.3
	1855	11	30.9	8.5
	1910	12	30.8	6.4
	1750	13	30.6	7.3
	1745	21	30.9	7.8
	1740	23	31.5	7.3

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
8/23/2022	710	1	28.9	6.1
	410	2	29.7	3.3
	720	3	29.4	5.4
	535	4	29.5	5.6
	420	5	30.2	3.6
	435	6	30.3	5.3
	455	7	30	5.8
	555	8	28.5	3.8
	615	9	29.5	5.6
	625	10	29.4	5.4
	635	11	29.1	6.2
	650	12	29.7	5.3
	525	13	29.6	5.8
	520	21	29.7	5.5
	515	23	29.8	5.4

All measurements taken one foot below the surface

NUTRIENTS

Water samples for nutrient analyses were collected one foot below the surface (S) and one foot above the bottom (B) at stations 1,5,6,8,9,10 and 11. Values are reported as milligrams per liter (mg/l or PPM) of the element in the compound. * The lower limit of detection is 0.001 mg/l for nitrate (NO₃-N) and nitrite (NO₂-N) nitrogen, and 0.016 mg/l for phosphate phosphorus (PO₄-P). ND means not detectable.

* Strickland and Parsons (1968). A Practical Handbook of Seawater Analysis. Fisheries Research Board of Canada. Ottawa.

Date	Time	Station	Depth(ft)	NO ₃ -N	NO ₂ -N	PO ₄ -P
8/22/2022	1925	1B	12	0.012	0.001	ND
		1S				
	1640	5B	10	0.003	0.001	ND
		5S				
	1655	6B	13	0.001	0.009	ND
		6S				
	1820	8B	11	0.003	0.001	ND
		8S				
	1835	9B	11	0.032	0.005	ND
		9S				
	1845	10B	13	0.015	0.001	ND
		10S				
	1855	11B	12	0.005	0.001	ND
		11S				

Date	Time	Station	Temp C	D.O.mg/l
8/30/2022	1830	21	31.4	8.4
	1840	23	32	7.9
8/31/2022	635	21	30	4.4
	645	23	30.2	4.2

